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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/649,911

08/26/2003

William Robert Haas

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INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

KHAN, USMAN A

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

09/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/649,911

Applicant(s)

HAAS ET AL.

Examiner

Usman Khan

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed on 06/13/2007 with respect to claims 1 – 12 and 15 – 19 have been considered but are not persuasive.

Election/Restrictions

Applicant's election with traverse of Groups 1 and 2 with respect to claims 1 – 12 and 15 – 19 respectively in the reply filed on 06/13/2007 is acknowledged. The traversal is on the ground(s) that the groups are not distinct and both groups will have utility in both a digital camera and a scanner. This is not found persuasive because as stated in the restriction requirement that **Group 1** is drawn to merely light filters and does not require a scanning device which is classified in class 348, subclass 270 whereas **Group 2** is drawn to a scanning device for scanning a document using transmitting and blocking light classified in class 358, subclass 474. Group 1 can also be seen with respect to figures 1 – 5 and Group 2 can also be seen with respect to figures 6 – 7 i.e. scanning device.

The requirement is still deemed proper and is therefore made FINAL.

Please refer to the following office action, which clearly sets forth the reasons for non-persuasiveness.

In response to applicant's argument that in claim 15 Yamasaki teaches a structure and not a method and there is no teaching of directing the light that reaches the image sensor apparatus. Also, applicant argues that Yamasaki does not teach

alternatively transmitting and at least partially blocking said light for said different pixel location in sequence. Also, applicant argues that Yamasaki does not teach reading out a single pixel at different points in time corresponding to the transmission of said light" to "different portions" of that same pixel.

In response to applicant's arguments, that Yamasaki teaches a structure and not a method and there is no teaching of directing the light that reaches the image sensor apparatus. As stated in the previous office action figure 37 teaches this limitation. More specifically, this light is sent from the path shown in figures 5 – 7 and 36 i.e. light is sent to figure 4 and 37; i.e. color filter array of multiple filters for each individual pixel.

In response to applicant's arguments, that Yamasaki does not teach alternatively transmitting and at least partially blocking said light for said different pixel location in sequence. As stated in the previous office action figure 4; i.e. color filter array of multiple filters for each individual pixel teaches this limitation, more specifically figure 4 the color filters can block or transmit different lights through. Also, paragraphs 0105 and 0210.

In response to applicant's arguments, that Yamasaki does not teach reading out a single pixel at different points in time "corresponding to the transmission of said light" to "different portions" of that same pixel. As stated in the previous office action paragraphs 0141 *et seq.* teaches this limitation. More specifically paragraphs 0144 *et seq.* teaches that a phase shift amount is detected by known correlation calculation serving as a phase shift amount detection means using image signals obtained by

independently reading output signals from the first and second photoelectric conversion units.

DETAILED ACTION

Election/Restrictions

Claims 1 – 12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group 1, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/13/2007.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15 - 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamasaki (US PgPub 2002/0121652).

Regarding **claim 15**, Yamasaki discloses a method for scanning an object (figure 37), comprising: directing light from different locations of the object to different portions of a pixel (figure 37); alternately transmitting and at least partially blocking said light for said different pixel locations in sequence (figure 4; i.e. color filter array of multiple filters for each individual pixel); and reading out said pixel at different times corresponding to the transmission of said light to said different pixel portions (paragraph 0141 *et seq.*).

Regarding **claim 16**, Yamasaki discloses the method of claim 15, wherein said pixel is in an array of pixels (figure 4; i.e. color filter array of multiple filters for each individual pixel), further comprising directing light from different respective locations of said object to different portions of each of said pixels (figure 4; i.e. color filter array of multiple filters for each individual pixel), alternately transmitting and at least partially blocking said light for said different pixel portions in sequence, and reading out said pixels so that each pixel can distinguish between more than one spatial region on said image (paragraph 0037 *et seq.*).

Regarding **claim 17**, Yamasaki discloses the method of claim 16, wherein said light is substantially fully blocked for said different pixel locations (paragraph 0097; specific wavelengths of light are sent through, i.e. it can block all light if none of the wavelengths required are present).

Regarding **claim 18**, Yamasaki discloses the method of claim 16, wherein said light is alternately transmitted and at least partially blocked for each of said pixels separately (paragraph 0097; specific wavelengths of light are sent through, i.e. it can block some light if some of the wavelengths are out of the required range).

Conclusion

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Usman Khan
09/04/2007
Patent Examiner
Art Unit 2622

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal stroke extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER